

REMARKS

I. General

Claims 17-32 are pending in the application. The specification was objected to due to an informality in the priority claim. Claim 17 is objected to because of informalities. Claims 17 and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,790,394 to Cabaniss et al. (hereinafter “*Cabaniss*”). The indicated allowability of claims 26 and 27 is withdrawn. Claims 18, 19, 24, and 26-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cabaniss* in view of U.S. Patent 5,404,092 to Gegner (hereinafter “*Gegner*”). Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cabaniss* in view of U.S. Patent 5,481,730 to Brown et al. (hereinafter “*Brown*”). Claims 22 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cabaniss* in view of *Brown* and further in view of U.S. Patent 6,700,767 to Li (hereinafter “*Li*”). Claim 25 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cabaniss* in view of U.S. Patent 6,198,642 to Kociecki (hereinafter “*Kociecki*”). Claims 28, 29, and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,580,251 to Takeuchi (hereinafter “*Takeuchi*”) in view of *Gegner* and U.S. Patent 6,845,023 to Philips et al. (hereinafter “*Philips*”). Claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Takeuchi* in view of *Gegner* and *Philips* and further in view of U.S. Patent 6,862,644 to Pendleton et al. (hereinafter *Pendleton*). Claim 31 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Takeuchi* in view of *Gegner* and *Philips* and further in view of U.S. Patent 6,894,439 to Stewart et al. (hereinafter “*Stewart*”).

II. Amendment to the Specification

The specification was objected to due to an informality in the priority claim. Specifically, the Office Action stated “[p]atent numbers and issue dates may be included in the reference, but the application numbers and relationships must be included.” Office Action, page 2. As such, paragraph [0001] has been amended to fully comply with M.P.E.P. § 201.11(III)(A). Furthermore, a petition has been submitted with the present response accompanied by (1) the reference required, (2) a surcharge under 37 CFR 1.17(t) in the amount

of \$1370.00, and (3) a statement that the entire delay between the date the claim was due and the date the claim was filed was unintentional. As such, Applicant requests the amendment be entered, and the claimed priority date of April 29, 2000 be recognized.

III. Objections to the Claim

Claim 17 is objected to because of informalities. Specifically, the Office Action states that “claim 17, line 4 contains the phrase ‘hot swapping’. It appears this should be ‘switching’. Appropriate correction is required.” Office Action, page 4. However, the phrase should not be “switching” because “hot swapping” has a different meaning. Paragraph [0006] states that “[t]his also allows the BPSs to be hot swappable, meaning that a BPS can be changed for a new one, without shutting the system down.” As such, “hot swapping” has a specific meaning and is the appropriate phrase. Therefore, Applicant respectfully requests the objection of record be withdrawn and the claim be allowed.

IV. Rejections Under 35 U.S.C. § 102

Claims 17 and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Cabaniss*. Applicant respectfully traverses the rejections of record.

Claim 17 recites “at least one isolation diode for hot swapping between said first bulk power supply and said second bulk power supply without disabling the first or second bulk power supply” The Office Action cites *Cabaniss* (column 3, lines 58-61) as teaching this limitation. Office Action, page 4. However, the cited lines fail to show an isolation diode for hot swapping between the first bulk power supply and the second bulk power supply. Instead, *Cabaniss* teaches a diode for preventing the separate AC power source feeds from connecting in the event that a bridge rectifier diode should short. Col. 3, lines 58-61. As *Cabaniss*’s diodes are for *preventing connections* between power supplies and claim 1’s diodes are for *hot swapping* between the first and second power supply, *Cabaniss* fails to teach claim 1’s diodes.

Further, claim 17 recites “at least one isolation diode for hot swapping between said first bulk power supply and said second bulk power supply without disabling the first or second bulk power supply” (emphasis added). In contrast, *Cabaniss*’s fault protection diode only operates if a power supply is disabled. Specifically, *Cabaniss*’s diodes operate “in the event that a bridge rectifier diode should short.” Col. 3, lines 60-61. When a bridge rectifier shorts, the power supply becomes disabled. As a result, *Cabaniss* fails to teach “at least one isolation diode for hot swapping between said first bulk power supply and said second bulk power supply without disabling the first or second bulk power supply”

Accordingly, the cited art fails to teach claim 17. Therefore, Applicant respectfully requests the rejection of record be withdrawn and the claim be allowed. Furthermore, claim 20 depends from claim 17 thereby inheriting all of claim 17’s limitations. As such, claim 20 is patentable over the rejection of record at least for the reasons above. Therefore, Applicant respectfully requests the rejection of record be withdrawn and the claim be allowed.

V. Rejections Under 35 U.S.C. § 103

To establish a *prima facie* case of obviousness, three basic criteria must be met. *See* M.P.E.P. § 2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. Without conceding the second criteria, Applicant respectfully asserts that the rejection does not satisfy the first and third criteria.

A. Claims 18, 19, 24, and 26-32

Claims 18, 19, 24, and 26-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cabaniss* in view of *Gegner*. Applicant respectfully traverses the rejections of record.

1. Limitations of the Claims are not Taught

a. Claims 18, 19, and 24

Claims 18, 19, and 24 depend from independent claim 17 and inherit all the limitations therein. While *Gegner* is relied on as teaching the further limitations of claims 18, 19, and 24, *Gegner* is not relied on as teaching the above identified deficiencies regarding claim 17. As such, the dependent claims are patentable at least for the reasons discussed regarding claim 17. As such, Applicant respectfully request the rejections of record be withdrawn and the claims be allowed.

b. Claims 26 and 27

Independent claim 26 recites “at least one isolation diode, wherein said at least one isolation diode switches between said first converter chain and said second converter chain upon failure of one of said converter chains” The Office Action fails to point to anything in the cited art as teaching this claim and therefore fails to make a *prima facie* showing of obviousness against claim 26. Furthermore, the cited combination fails to teach or suggest an isolation diode which *switches* between the first converter chain and second converter chain upon the failure of one of the converter chains. Instead, *Cabaniss* teaches the use of a fault protection diode which prevents a disabled power supply line from connecting to the other power supply line in the event that a bridge rectifier should short. *Cabaniss*, col. 3, lines 58-61. Thus, *Cabaniss*’s fault protection diodes serve a separate and distinct function from claim 26’s isolation diode thereby failing make claim 26’s isolation diode obvious.

Furthermore, *Gegner* fails to teach an isolation diode. Moreover, as *Gegner* teaches the use of a single power supply line, one of ordinary skill in the art would not find that *Gegner* suggests “at least one isolation diode, wherein said at least one isolation diode switches between said first converter chain and said second converter chain upon failure of one of said converter chains”

Accordingly, the cited art fails to teach claim 26. Therefore, Applicant respectfully requests the rejection of record be withdrawn and the claim be allowed. Furthermore, claim 27 depends from claim 26, thereby inheriting all of claim 26's limitations. While Higashi is relied on as teaching the further limitations of claim 27, Higashi is not relied on as curing the above identified deficiencies regarding claim 26. As such, claim 27 is patentable over the rejection of record at least for the reasons above. Therefore, Applicant respectfully requests the rejection of record be withdrawn and the claim be allowed.

c. Claims 28-32

Independent claims 28 recites:

A method of providing a supply power output for a user system comprising:
receiving a first AC input from a first AC input line;
receiving a second AC input from a second AC input line;
converting said first AC input and said second AC input into DC power;
adjusting said DC power to ensure that said DC power has at least a predetermined value for a power factor;
sending said adjusted DC power to at least two converters, wherein said at least two converters are designated to receive DC power of differing voltage levels;
transmitting outputs of said at least two converters to at least one isolation diode and to an output filter; and
receiving an output from said output filter.

The Office Action states "Higashi discloses the outputs of at least two DC-DC converters (16-20) being transmitted to an output filter (19,20) (see column 4, lines 65-67 and column 5, lines 29-34)." Office Action, page 7. However, the Office Action fails to cite any art as teaching the remaining limitations of the claim. It is well established that "[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." M.P.E.P. 2143.03 As such, because the Office Action has failed to cite any prior art as teaching the remaining limitations of claim 28, Applicant respectfully asserts a *prima facie* case of obviousness has not been established.

“The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.” M.P.E.P. 2142. Because a *prima facie* case of obviousness has not been established against claim 28, Applicant requests the rejection of record be withdrawn and the claim be allowed. Furthermore, claims 29-32 depend from claim 28 thereby inheriting the limitations therein. As such, a *prima facie* case of obviousness has likewise not been established against claims 29-32. Therefore, Applicant respectfully requests the rejections of claims 29-32 be withdrawn as well.

2. Motivation

a. Cabaniss in view of Gegner

The Office Action provided improper motivation for the combination of *Cabaniss* and *Gegner*. As such, Applicant asserts the rejections of record relying on this suggested combination are improper.

Specifically, the Office Action states that “[i]t would have been obvious... to use a line filter with the AC input power of *Cabaniss* and adjust the DC power output from the rectifiers, in order to reduce EMI noise” Office Action, page 6. However, “[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)” (emphasis added). M.P.E.P. 2143. The motivation, “in order to reduce EMI noise,” is derived from the Applicant's disclosure, see page 5, paragraph [0020]. Thus, the motivation provided by the Examiner is improper.

The Office Action also states one would be motivated to make the combination in order to “allow the output voltage, current, or power to be maintained independent of variations in the load.” Office Action, page 6. However, *Cabaniss* expressly teaches a method by which the output voltage, current, or power of each power supply will change based on the load's needs; therefore, *Cabaniss* expressly teaches away from the suggested modification. Specifically,

Cabaniss provides two power supply chains which share the load current to the system thereby supplying bulk DC voltage to common backplane 205. *Cabaniss*, col. 3, lines 37-39. If one power supply chain fails, the load will require more power from the second power supply chain, and the current and voltage output from the second power supply chain increases such that backplane 205 remains energized. *Cabaniss*, col. 3, lines 43-50. As such, *Cabaniss* teaches away from a desire to “allow the output voltage, current, or power to be maintained independent of the variations in the load.” Office Action, page 6. “It is improper to combine references where the references teach away from their combination,” M.P.E.P. § 2145. Therefore, Applicant respectfully asserts suggested combination is improper. Accordingly, Applicant requests the rejections of claims 18, 19, 24, and 26 relying on *Cabaniss* in view of *Gegner* be withdrawn and the claims be allowed.

b. Cabaniss, Gegner, and Higashi

“The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done.” M.P.E.P. 2142. The Office Action has failed to provide any motivation for combining *Cabaniss*, *Gegner*, and Higashi. As such, the combination is improper as the Office Action must establish the desirability for making the modification. Accordingly, Applicant requests the rejections of claims 27-32 relying on the combination of *Cabaniss*, *Gegner*, and Higashi be withdrawn and the claims be allowed.

B. Claim 21

Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cabaniss* in view of *Brown*. Dependent claim 21 depends from independent claim 17 and thus includes all of the limitations of claim 17 in addition to its own supplied limitations. While *Brown* is relied on as teaching claim 21’s further limitations, *Brown* is not relied on to cure the above identified deficiencies regarding claim 17. Thus, it is respectfully submitted that dependent claim 21 is allowable at least because of its dependence from claim 17. Accordingly, Appellant respectfully asserts the cited combination fails to teach claim 21 and requests the rejection of the record be withdrawn.

C. Claims 22 and 23

Claims 22 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cabaniss* in view of *Brown* and further in view of *Li*. Dependent claims 22 and 23 depend from independent claim 17 and thus includes all of the limitations of claim 17 in addition to their own supplied limitations. While *Brown* in view of *Li* is relied on as teaching claims 22 and 23 further limitations, *Brown* in view of *Li* is not relied on to cure the above identified deficiencies regarding claim 17. Thus, it is respectfully submitted that dependent claims 22 and 23 are allowable at least because of their dependence from claim 17. Accordingly, Appellant respectfully asserts the cited combination fails to teach claims 22 and 23 and requests the rejections of the record be withdrawn.

D. Claim 25

Claim 25 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cabaniss* in view of *Kociecki*. Dependent claim 25 depends from independent claim 17 and thus includes all of the limitations of claim 17 in addition to its own supplied limitations. While *Kociecki* is relied on as teaching claim 25's further limitations, *Kociecki* is not relied on to cure the above identified deficiencies regarding claim 17. Thus, it is respectfully submitted that dependent claim 25 is allowable at least because of its dependence from claim 17. Accordingly, Appellant respectfully asserts the cited combination fails to teach claim 25 and requests the rejections of the record be withdrawn.

E. Claims 28, 29, and 32

Claims 28, 29, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Takeuchi* in view of *Gegner* and *Philips*. Applicant notes that this Application is a continuation of 10/171,915, filed on June 14, 2002, which is a continuation of 09/940,973, filed on August 28, 2001, which is a divisional of 09/563,003, filed on April 29, 2000. Thus, *Takeuchi* is an improper reference as its filing date is April 19, 2002. Similarly, *Philips* is an improper

reference as its earliest priority date is November 6, 2000. Thus, the rejections of claims 28, 29, and 32 should be withdrawn.

F. Claim 30

Claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Takeuchi* in view of *Gegner* and *Philips* and further in view of *Pendleton*. Applicant notes that this Application is a continuation of 10/171,915, filed on June 14, 2002, which is a continuation of 09/940,973, filed on August 28, 2001, which is a divisional of 09/563,003, filed on April 29, 2000. Thus, *Takeuchi* is an improper reference as its filing date is April 19, 2002. Similarly, *Philips* is an improper reference as its earliest priority date is November 6, 2000, and *Pendleton* is an improper reference as its earliest priority date is May 7, 2001. Thus, the rejection of claim 30 should be withdrawn.

G. Claim 31


Claim 31 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Takeuchi* in view of *Gegner* and *Philips* and further in view of *Stewart*. Applicant notes that this Application is a continuation of 10/171,915, filed on June 14, 2002, which is a continuation of 09/940,973, filed on August 28, 2001, which is a divisional of 09/563,003, filed on April 29, 2000. Thus, *Takeuchi* is an improper reference as its filing date is April 19, 2002. Similarly, *Philips* is an improper reference as its earliest priority date is November 6, 2000, and *Stewart* is an improper reference as its earliest priority date is May, 4, 2001. Thus, the rejection of claim 31 should be withdrawn.

VI. Conclusion

In view of the above, Applicants believe the pending application is in condition for allowance.

Applicants believe a fee is due for the accompanying Petition to Correct Priority Claim, which fee is dealt with in the Petition. Applicants believe no additional fee is due. However, if a fee is due for this Response, please charge our Deposit Account No. 08-2025, under Order No. 10001445-4, from which the undersigned is authorized to draw.

Dated: July 10, 2007

<p>I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).</p> <p>Dated: July 10, 2007</p> <p>Signature:  (Lorraine Davidoff)</p>

Respectfully submitted,

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